

New York State Department of Transportation

Yellow Flag NB2222W013

By: Sahadeo Bhagwandin

Flag Date: June 01, 2022

Superseding Information:

No Flags Superseded

Structure Information

BIN: 1065318

Feature Carried: 278I278IX2M23027

Feature Crossed: 6TH AVENUE

Orientation: 8 - NORTHWEST

Region: 11 - NEW YORK CITY

County: KINGS

Political Unit: City of NEW YORK

Approximate Year Built: 1962

Posted Load Matches Inventory : Yes

Bridge Load Posting (Tons) : Not Posted for Load

Primary Owner: New York State Department of Transportation

Primary Maintenance Responsibility: 12 - State - Subcontracted to another Party

Typical or Main Span Type: 3 - Steel, 02 - Stringer/Multi-Beam or Girder

This Bridge is not a Ramp

Number of Spans: 322

Verbal Notification Information

Person Notified: Heinz Joachim, P.E.

Date: June 01, 2022 10:00:00 AM

Of: NYSDOT Region 11

Signature Information

Signature: Sahadeo Bhagwandin, P.E. 088239-1

Date: June 16, 2022

Reviewed By: Robert Kemp

Date: June 16, 2022

Attachments: 7

Flagged Elements

Parent Element	Element	Total Quantity	Unit
Span Number : 158			
	PR831 - Steel Beam End	34	each
	113 - Steel Stringer	104	ft

Flagged Condition Description

This Yellow Flag No. NB2222W013 is (NEW).

Location: Span 158 – Stringer S1 at Pier 157 over 3rd Avenue Westbound

Description: Stringer S1, supporting the Railing/Parapet above deck, exhibits severe corrosion of the web with several large corrosion holes adjacent to the connection angles. The web height between the top and bottom flange angles is 12.5" H. The hole at the top of the web is 5" H x 2" W, at mid-web is 2" L x ½" W and lower web is 2-1/2" L x 1" H. D-Meter readings indicate remaining web between the upper corrosion holes as 0.142" and between the lower 2 holes as 0.133". Overall web section loss is approximately 87%. See sketch for details.

This is a new flag.

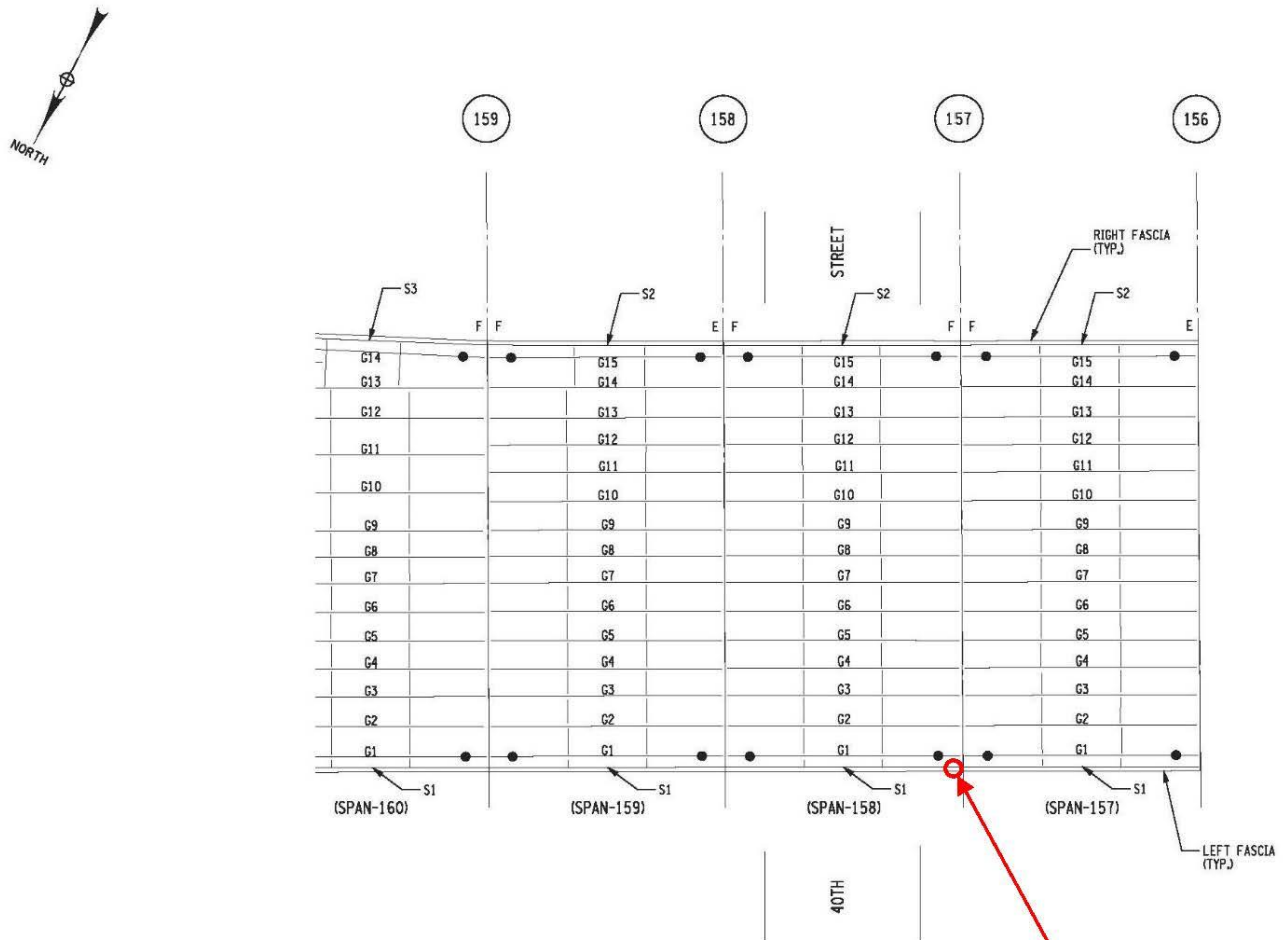
Notes:

1. Stringer S1 receives no direct live loading, but supports the barrier/railing above.
2. No deformation was observed in any part of Stringer S1 connection to Pier 157 Pier Cap.
2. The adjacent Girder G1 spaced 2'-3" center to center is in fair condition.
3. Stringer S1 at Span 157, Pier 157 begin face exhibits corrosion at bottom flange for 24" long section with up to 1/8" section loss and 2 corrosion holes adjacent to the bearing. (Repair Required)
4. Double left lane closure at 3rd Avenue Out-Bound (Verrazano Bridge) between 39th and 40th Streets, and a 35' bucket truck are required to access this location.

Flag Photographs

Photo Number: 1

Photo Filename: BIN1065318 YF NB2222W013 Framing Plan - 2022.jpg



LEGEND:

E - Expansion Bearing Element PR311

F - Fixed Connection

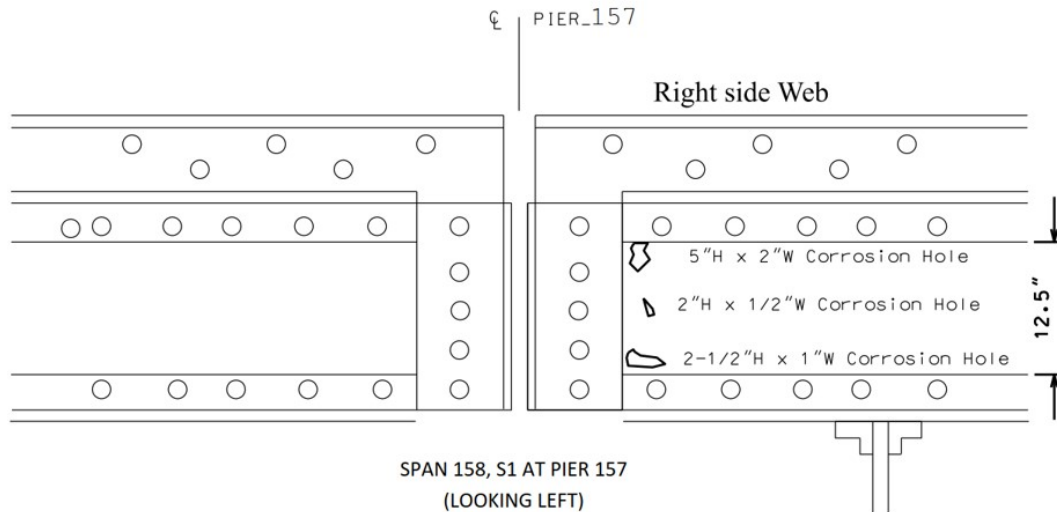
G - Girder Element 107

S - Stringer Element 113

- End of partial length cover plate. Category E' requires 100% Hands on Inspection.

**YELLOW FLAG
LOCATION
No. NB2222W013**

Attachment Description: SN 158 S1 at Pier 157 Framing Plan

Photo Number: **2**Photo Filename: **BIN 1065318 - SN158 S1 at P157_R.jpg**Gowanus Expressway
2022 Biennial Inspection - Field SketchBIN: 1065318Team: SB / CTDate: 6/01/2022Span: 158Location: Stringer S1 at Pier 157

$$\text{Remaining Web} = (5" \times 0) + (2-1/2" \times 0.142) + (2" \times 0) + (2" \times 0.133) + (1" \times 0) = 0.621 \text{ in}^2$$

$$\text{Web Area} = 12.5" \times 0.385" = 4.81$$

$$\text{Web Loss} = (4.81 - 0.621) / 4.81 = 87\%$$

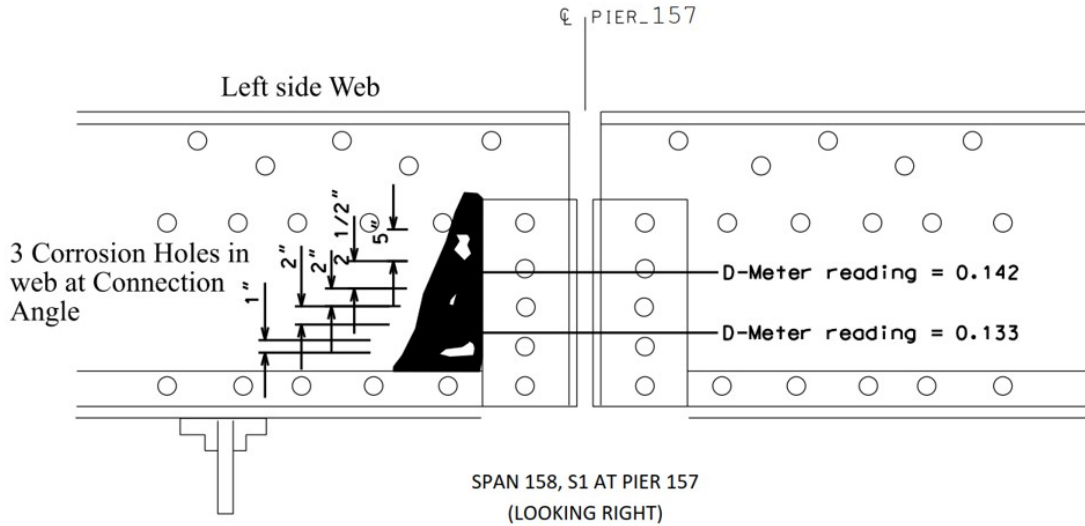
SCALE: N.T.S**Attachment Description: SN 158 S1 at Pier 157 Sketch**

Photo Number: 3

Photo Filename: Photo 1-IMG_6254--edit.jpg



Attachment Description: Photo 1: General view of Flag location at Pier 157. Looking begin.

Photo Number: 4

Photo Filename: Photo 2-IMG_6200--edit-2.jpg



Attachment Description: Photo 2: Span 158, Stringer S1 at Pier 157 - Corrosion holes at web of Stringer S1. Looking right

Photo Number: 5

Photo Filename: Photo 3-IMG_6192-edit-2.jpg



Attachment Description: Photo 3: Span 158, Stringer S1 at Pier 157 - General view at right side web of stringer. Looking begin left.

Photo Number: 6

Photo Filename: Photo 4-IMG_6195--edit-2.jpg



Attachment Description: Photo 4: Span 158, Stringer S1 at Pier 157 - Close up view of corrosion holes at lower section of web measuring 2-1/2"L x 1"H and 2"H x 1/2" wide. Looking left.

Photo Number: 7

Photo Filename: Photo 5-IMG_6196--edit-3.jpg



Attachment Description: Photo 5: Span 158, Stringer S1 at Pier 157 - Large corrosion hole at upper section of web measuring 5"H x 2"W. Looking left.